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Coursework in Abstract Algebra is required in virtually all certification programs for Preservice Secondary Mathematics Teachers (PSMTs). This requirement is justifiable on many grounds, including the existence of deep connections between course concepts and the school mathematics curriculum. But how are these connections established and employed, if at all, by the PSMTs? As part of our research, we developed and taught an abstract algebra course to a class composed almost entirely of PSMTs. Course content was traditional, but a strong effort was made to develop explicit conceptual connections to school mathematics. After the course ended, students with demonstrated command of the course content were interviewed in depth on connected concepts such as division by zero and even numbers. In their discussions of these concepts, the interview subjects frequently resorted to rules or metaphors, which then served as ‘definitions’ from which flawed mathematical arguments were made. In this, our second year, we set as an additional course goal the careful analysis of various rules and metaphors and their extensions beyond the counting numbers. Student work and interview data will be presented, and specific curricular interventions will be discussed. (Received September 25, 2006)